

CHECKING AND SETTING OF THE GMV RUPTURE VALVE (VC 3006 – TYPE B) WHEN FITTED IN COMBINATION WITH A GMV 3010 VALVE BLOCK.

The rupture valve consists of a valve which stops the oil flow when the downward speed exceeds the preset value. It ensures a deceleration lower than g_n (9.81m/s^2).

CHECKING AN EXISTING RUPTURE VALVE SETTING:

- Load the lift car with full load and call it to the top floor.
- Tighten the screw #5 (see diagram below) until it is fully closed. Take care not to over tighten it.
- Place a call to the bottom floor.
 - If the lift does not stop within 2 m, then switch the lift off to prevent it crashing onto the buffers.

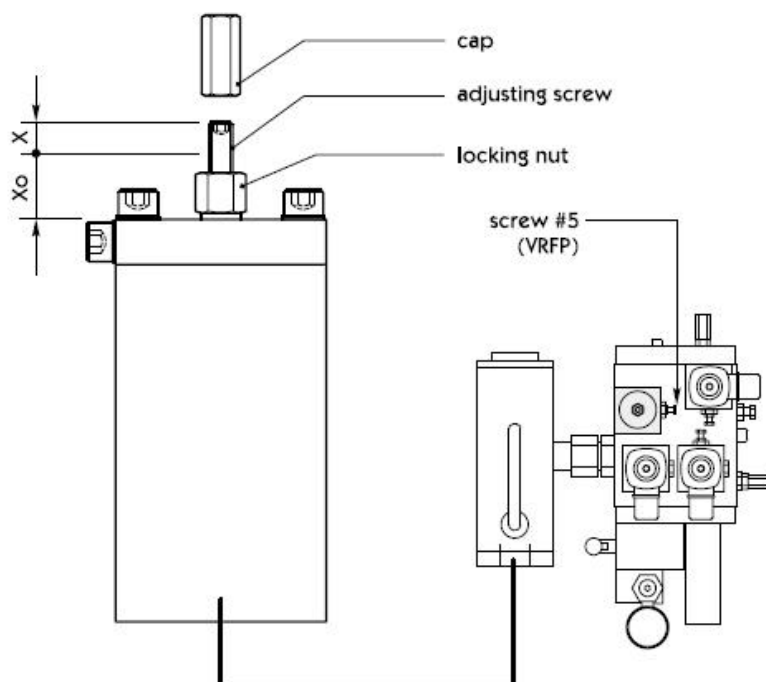
In this case it is necessary to re-adjust the rupture valve as follows:

- ◆ Remove the cap, untighten the locking nut and screw in the adjustment screw, one turn.
- ◆ Call the lift to the top floor and then place a call to the bottom floor.
- ◆ Repeat this operation until the valve closes and the following nominal dimensions are achieved.
 - 1000 mm for speeds 0.3 m/s
 - 1200 mm for speeds 0.63 m/s
 - 1500 mm for speeds 0.80 m/s
 - Dimensions for intermediate speeds can be by interpolation.
- If the lift does stop, check the distance that the lift has travelled.
If the distance is less than those stated above:
 - ◆ Remove the cap, untighten the locking nut and screw out the adjustment screw, one turn.
 - ◆ Repeat this operation until the valve closes and the nominal dimensions are achieved.

- After the correct stopping distance has been achieved, untighten screw #5 fully and run the lift several times to ensure that the rupture valve does not operate during normal down travel.

IMPORTANT!!!

Once the check is done re-assemble the cap on the adjusting screw.



SETTING A NEW RUPTURE VALUE FOR THE FIRST TIME:

- Remove the cap from the adjusting screw and loosen the locking nut.
- Tighten the rupture valve adjustment screw in fully and measure and record the distance X_0 (This is the distance from the top of the adjusting screw with the valve completely closed). Refer to diagram on page 1.
- Screw out the adjustment screw by a distance equal to the value X .
The distance from the top of the adjusting screw will now be $X + X_0$.
 X can be determined from the table below, using the following data:
 - rupture valve size (this will be identified on the rupture valve data plate)
 - pump flow rate (this will be identified on the power unit data plate).
- Carry out the test procedure detailed on page 1

Value of distance X , as a function of pump flow rate and rupture valve size.

Rupture Valve Size	Pump flow rate (l/min)	Distance X (mm)	No of turns on screw
1"	25	4.5	3 ½
	30	5.0	4
	35	5.5	4 ½
	43	6.0	4 ¾
	55	7.0	5 ½
	75	8.0	6 ½
	100	9.5	7 ½
1" ¼	75	7.0	5 ½
	100	8.0	6 ½
	125	9.0	7 ¼
	150	10.0	8
	180	11.0	8 ¾
	210	12.0	9 ½
1" ½	180	9.5	7 ½
	210	10.5	8 ½
	250	12.0	9 ½
	300	13.0	10 ½
	360	14.5	11 ½
	430	15.5	12 ½
2"	430	14.0	11 ¼
	500	15.5	12 ½
	600	18.5	14 ¾
2" ½	720	24.5	16 ¼
	860	26.5	17 ¾
	1000	27.5	18 ¼

NOTE:

Down travel flow rate is assumed to be equal to up travel rate.